

# The Jagiellonians and the Stars

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The largest centre for astronomical and astrological study in the fifteenth century was the University of Cracow, which always was under special care of Jagiellonians. The use of astronomy and astrology at Jagiellonian courts in the fifteenth and sixteenth centuries were very common. We try to convince the reader about this, exposing very limited historical sources.

## Introduction

In the year 1364 King Casimir the Great received the permission of the Pope to establish a university in the capital of his kingdom, Cracow. The site of the university was, in all probability, under the eye of the King in the royal castle on Wawel Hill. The premature death of King Casimir in 1370 together with the total lack of interest in the University by his successor, King Ludvic the Hungarian, led to the collapse of the University.

In 1384, Hedvig, the 11-year-old girl was called to Poland by the knights and representatives of towns to ascend the Polish throne. The magnates chose to give her hand to the pagan ruler of the Grand Duchy of Lithuania, Jogaila, under the condition that Lithuanians had to become Christian and part of the Polish Kingdom. The Union was concluded at Krewa in 1385. One year later, Jogaila was baptized in Cracow, assuming the name Ladislas, and the assembly of Polish knights elected him King of Poland. This was the beginning of the rules of Jagiellonian dynasty in Polish Kingdom.

The University was refounded in the year 1400 through the efforts of Queen Hedvig. Her pleas at the papal court in Avignon and the bequeathing of her personal fortune to the School enabled it to be re-established, on a new basis, as a full four-faculty medieval university. Collegium Maius was built then, whereas circa 1405 a chair of astronomy was founded by Stobner. 54 years later a chair of astrology was created, which in the following years was famed beyond the borders of the Polish Kingdom.

The reinvigorated Cracow University immediately established itself in the world of learning. Its first rector Stanisław of Skarbimierz, the author of the famous work 'De bello iusto', today is regarded as one of the founders of international law. In the second half of the fifteenth century the Cracow schools of mathematics and astrology blossomed. Their most important representatives were: Marcin Król of Żurawica (1422- before 1460), Marcin Bylica of Olkusz (1433-1493) who became the chief astrologer to King Maciej Korwin in Buda, Marcin Biem (circa 1470-1540) who devised the reform of the Julian calendar, Jan of Głogów (1445-1507) who was the author of many mathematical and astronomical tracts which were known to all of Europe, Wojciech of Brudzewo (circa 1446-1495) who was the teacher of many students who later went on to become leading academics at other European universities. During this period Mikołaj Kopernik (Nicolaus Copernicus) studied liberal arts in Cracow from 1491 to 1494. In his later years he maintained that he was greatly indebted to the Cracow University. The importance of this University can be gauged by the fact that in the years 1433-1510 as many as 44% of the students came from abroad [2]

In the course of the 15th century representatives of Cracow University radically changed their attitude toward astrology. While distinguished doctors of canon law such as Stanisław of Skarbimierz, Tomasz of Strzempin and theology professor Benedykt Hesse distanced themselves from astrology and questioned the reliability of astrological prognostications, at the end of the century Jan of Głogów, master of philosophy, regarded astrology as a science and even obtained large profits from practising it, although he realized that astrological practices conflicted with Catholic teaching [1].

## Astrology in the Middle Ages

It should be understood that medieval astrology was not held universally to be an example of ‘diabolical’ trumpery, despite the disapproval it earned from certain fathers of the Church such as St. Augustine. In the fifteenth and sixteenth century for many people it was ‘proper science’, which often meant the same as astronomy and involved detailed observation of the skies, the calculation of time and calendars (predicting in advance the date of Easter, to give its most common and necessary use). It was also used to establish celestial positions which were regarded by serious scholars as being significant for their influence human life, for birth, death, sickness, personal character and so forth. Cardinal Pierre d’Ailly (1350-1420) attempted to set down a world chronology from Creation to the Second Coming basing on astrological calculations, and the Polish astrologer Jan of Głogów agreed with him, that astrology was not out of keeping with Christianity, even though some bad astrologers might abuse it by mixing it with magic [3]. Therefore, the use of astrology at court was not itself sinful (after [5]).

## Astrology and history

As some historians argue, astrological writings are very helpful when they want to do dating of many events in the past. The famous annalist, Jan Długosz, was compiling his historical chronicle of Polish Kingdom using old almanacs written by astrologers. Długosz probably used astrological calendars on which many historical events were recorded. There were made also historical horoscopes to illustrate when certain cities or states formed or expanded their borders [5].

## Astrological predictions

There are numerous arguments that astronomy and astrology was not strange for Jagiellonians. They not only supported the development of these sciences but also tried to rely on their results and predictions. Astrology was known and practised at the Jagiellonian court.

Two horoscopes for the child of queen Hedwig are the oldest preserved in Poland [4]. The first horoscope, incomplete and with many corrections, refers to date of the conception of the child, 16 IX 1398, at noon, for which ascendant falls in the 6<sup>th</sup> grade of Sagittarius. Horoscope was written just after this date. The second horoscope refers to the date of birth (22 VI 1399, at 11:28). Ascendant was in the 23<sup>rd</sup> grade of Virgin. It was written directly after childbirth, for it has no name of the daughter. Astrologer predicted the birth of a son in 1399. When on 22<sup>nd</sup> June 1399 instead of the son, the daughter was born, the Cracovian astrologer explained that he was wrong not the science.

During the reign of Jogaila people started to pay careful attention to celestial phenomena. Observations of Solar and Lunar eclipses were carried out. During those days, the Battle of Grunwald between the joined forces of the Kingdom of Poland and the Grand Duchy of Lithuania against the Knights of the Teutonic Order took place on July 15, 1410. From an anonymous chronicle we know that in the night of 14<sup>th</sup> and 15<sup>th</sup> July the Moon had a crimson colour and on its background a red sword was shown. At the face of the Moon people saw the battle between the Royal Army and Teutonic Order and this battle ended with a great victory of the king while the Teutonic Order were knocked off the Moon.

In 1424-1427, an astronomer Henry Czech stayed at the court of Jogilla. He was present during the childbirth of three sons of Jogilla and predicted their future.

On March 2, 1456 a son of Casimir IV Jagiellon and queen Elizabeth was born. The Royal couple had an astrologer, Peter Gaszowiec (1430-1474), who prepared the horoscope for him.

The period of Sigismund August (1548-1572) was a very good time for astrologers. The King was enamoured in secret sciences. Also his mother - queen Bona - tried to predict the future. Royal astrologers of her son were Peter Proboszczowicz and Martin Fox. After advice of Proboszczowicz, the King rescheduled a coronation Catherine of Austrian two times. Astrologer also predicted the death of the King. He mentioned the number 72 but did not say if this date was the calendar year or an age of the King. In fact Sigismund died in 1572 being 52. Martin Fox also predicted the death Sigismund but in 1552. This prediction was nearly true. That year the King met with Albrecht Hohenzollern. While entering a town the King was welcome with cannon salvos. One of the cannonballs flew in the direction of the King killing the person next to him. Proboszczowicz and Fox had a big influence on the king.

## Conclusions

During the reigns of the Jagiellonian dynasty the sciences referred to stars and the heaven were sufficiently supported by the government. Astronomy and astrology were very important in the XV-XVI centuries in the Polish Kingdom. In that time Cracow was the main astronomical centre in Europe. Astronomy and astrology strongly influenced the public life and they were the subject of great interest of the Church and government authorities.

## References

- [1] Bull. Jagiellonian Library, XLIX, p. 95, (1999)
- [2] Markowski, M., Historia astronomii w Polsce, ed. E. Rybka, V. 1, pp. 57-86, (1975)
- [3] Malewicz, M. H., Medieval Studies (Studia Mediewistyczne), V. 24, pp. 153-175, (1985)
- [4] Rosińska, G., Kultura Polski Średniowiecznej XIV i XV w., ed. Geremek B., p.749, (1997)
- [5] Rowell, S.C., Lithuanian Historical Studies, V. 7, pp. 23-42, (2002)